

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/792,043	10/792,043 03/02/2004		Hai Yan	A-71587	4728
40461	7590	02/07/2005		EXAMINER	
EDWARD			KWOK, HELEN C		
1100 ALMA STREET, SUITE 207 MENLO PARK, CA 94025				ART UNIT	PAPER NUMBER
				2856	
			DATE MAILED: 02/07/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/792,043	YAN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Helen C. Kwok	2856					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period who is period for reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	e6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONED	ely filed swill be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 29 No.	ovember 2004.						
2a) ☐ This action is FINAL . 2b) ☒ This	action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
						Disposition of Claims	
4) Claim(s) 1-27 is/are pending in the application.	Claim(s) <u>1-27</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☑ Claim(s) 27 is/are allowed.						
5)⊠ Claim(s) <u>27</u> is/are allowed.							
6)⊠ Claim(s) <u>1-18 and 20-24</u> is/are rejected.							
7) Claim(s) <u>19,25 and 26</u> is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119	,						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
Certified copies of the priority documents	have been received in Application	on No					
Copies of the certified copies of the prior	ity documents have been receive	d in this National Stage					
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6) Other:							

Application/Control Number: 10/792,043

Art Unit: 2856

DETAILED ACTION

Page 2

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-5, 7-18, 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by either U.S. Patent 5,530,342 (Murphy) or U.S. Patent 6,621,279 (Ward) [It should be noted that the first reference numeral corresponds to Murphy. and the second reference numeral separated by a semicolon corresponds to Ward).

With regards to claims 1-5, 7-11, the references, Murphy and Ward, disclose a dual-mass vibratory gyroscope comprising, as illustrated in Figure 3 of Murphy; Figures 1-2A of Ward, first and second masses 310,312;20,22 mounted in a manner to permit anti-phase dithering motion along a first axis and differential motion along a second axis in response to a Coriolis force produced by rotation about a third axis; mean for

coupling the masses together through electrostatic forces (as described in column 5, lines 1-4 of Murphy; column 4, lines 41-51) which is a function of the relative positions of the masses having different resonant frequencies; a plurality of parallel plates connected to the masses 340,342;18; a plurality of sensors coupled to the masses 344,346;18 wherein the masses are spaced above a substrate. (See, column 4, line 43 to column 5, line 62 of Murphy; column 4, line 15 to column 5, line 65 of Ward).

With regards to claims 12-18 and 20, the claims are commensurate in scope with the above claims and are rejected for the same reasons as set forth above.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over either U.S. Patent 5,530,342 (Murphy) or U.S. Patent 6,621,279 (Ward) in view of U.S. Patent 5,895,850 (Buestgens).

With regards to claim 6, neither Murphy or Ward suggest a third mass coupled to the first and second masses. Buestgens discloses a gyroscope comprising, as illustrated in Figures 1, first mass 1; second mass 2; and third mass 3 coupled to the first and second mass. It would have been obvious to a person of ordinary skill in the

Application/Control Number: 10/792,043

Art Unit: 2856

art at the time of invention to have readily recognize the advantages and desirability of employing a third mass to the apparatus of either Murphy or Ward as suggested by Buestgens to further enhance the apparatus so that the gyroscope system is insensitive to interference effects. (See, column 3, line 47 to column 4, line 7 of Buestgens).

Page 4

With regards to claim 24, the claim is commensurate in scope with the above claims and is rejected for the same reasons as set forth above.

Allowable Subject Matter

- 6. Claims 19 and 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Claim 27 is allowed over the prior art of record.

Response to Amendment

8. Applicant's arguments with respect to claims 1-27 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen C. Kwok whose telephone number is (571) 272-2197. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen C. Kwok Art Unit 2856

hck February 2, 2005